



STATE OF MARYLAND

# DHMH

Maryland Department of Health and Mental Hygiene  
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

## Office of Preparedness & Response

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January 15, 2010

## Public Health & Emergency Preparedness Bulletin: # 2010:01 Reporting for the week ending 01/09/10 (MMWR Week #01)

### CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)  
Maryland: Yellow (ELEVATED)

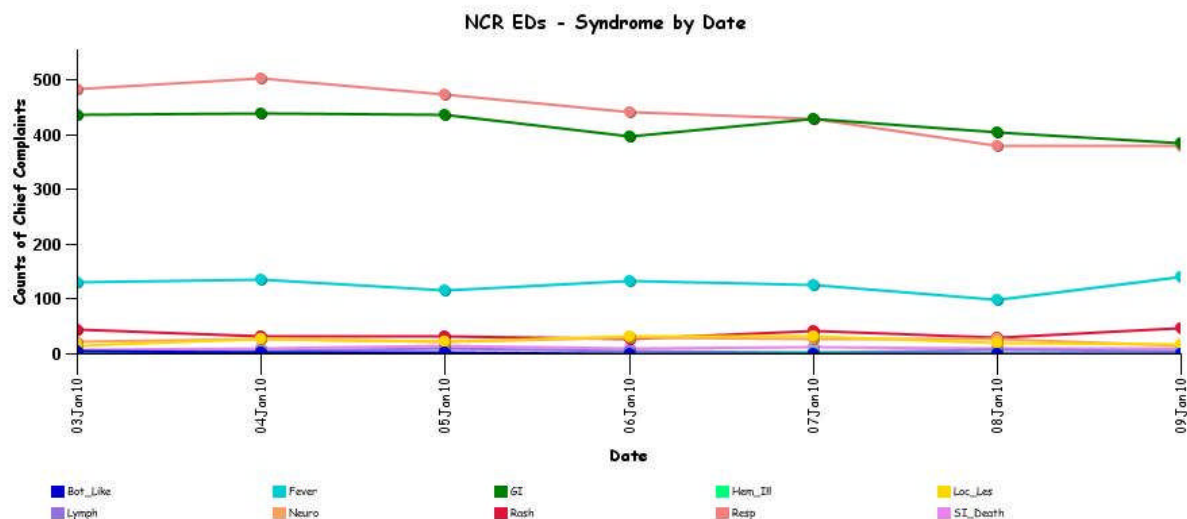
### SYNDROMIC SURVEILLANCE REPORTS

#### ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled.

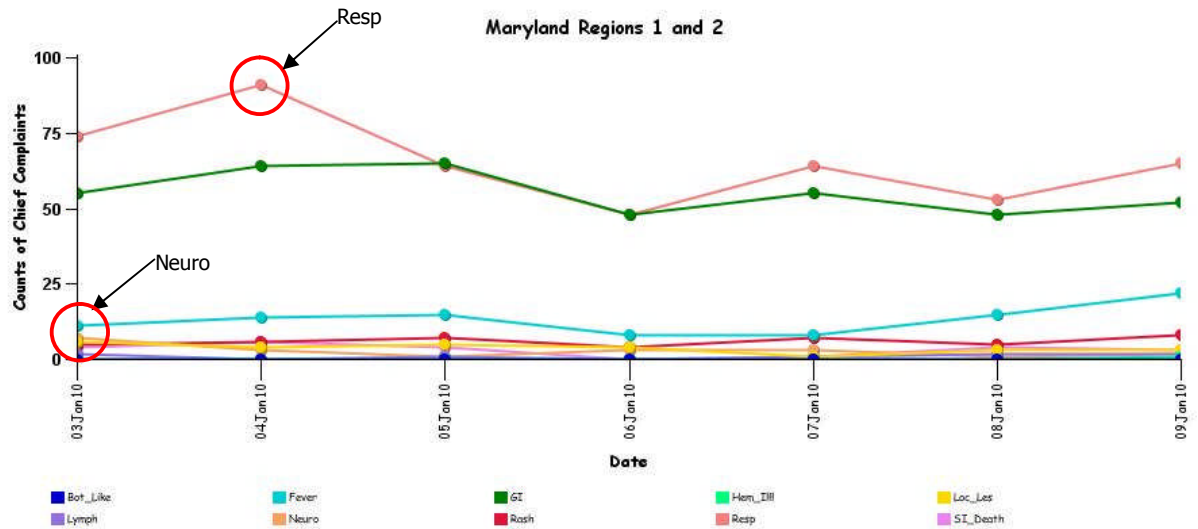
Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

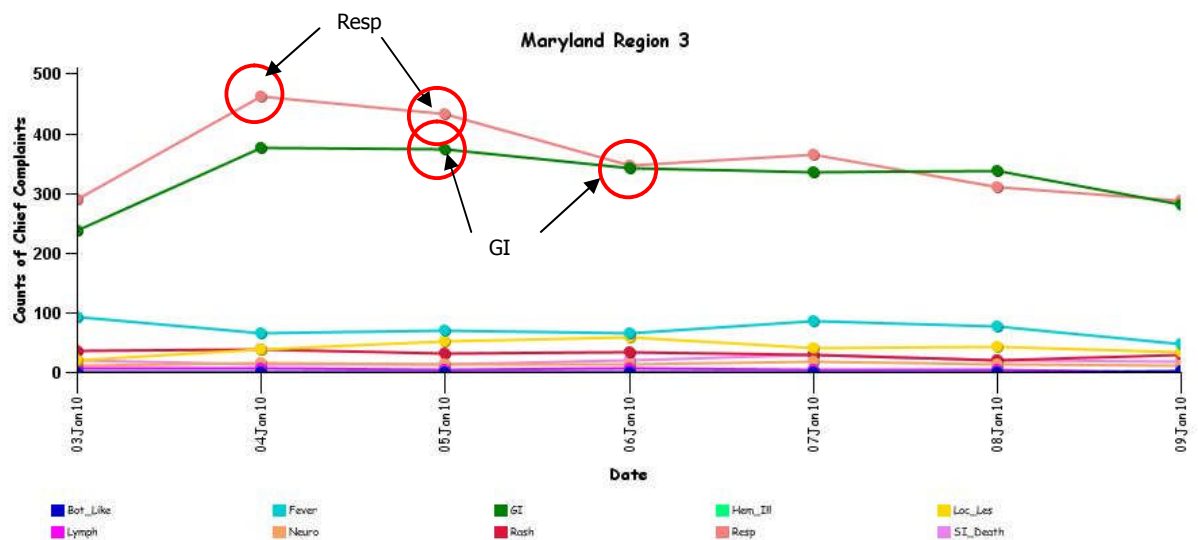


\* Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

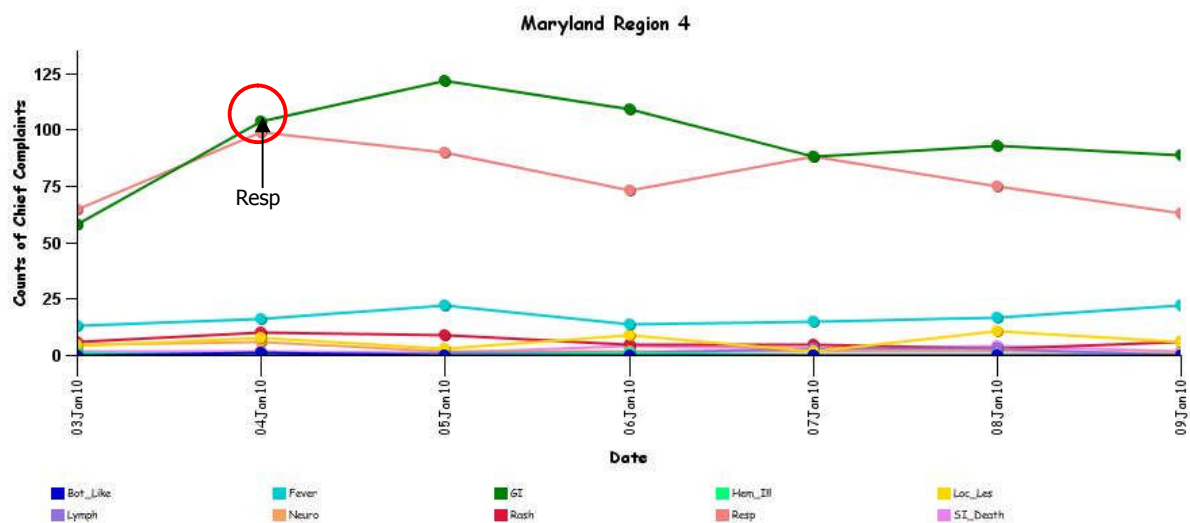
## MARYLAND ESSENCE:



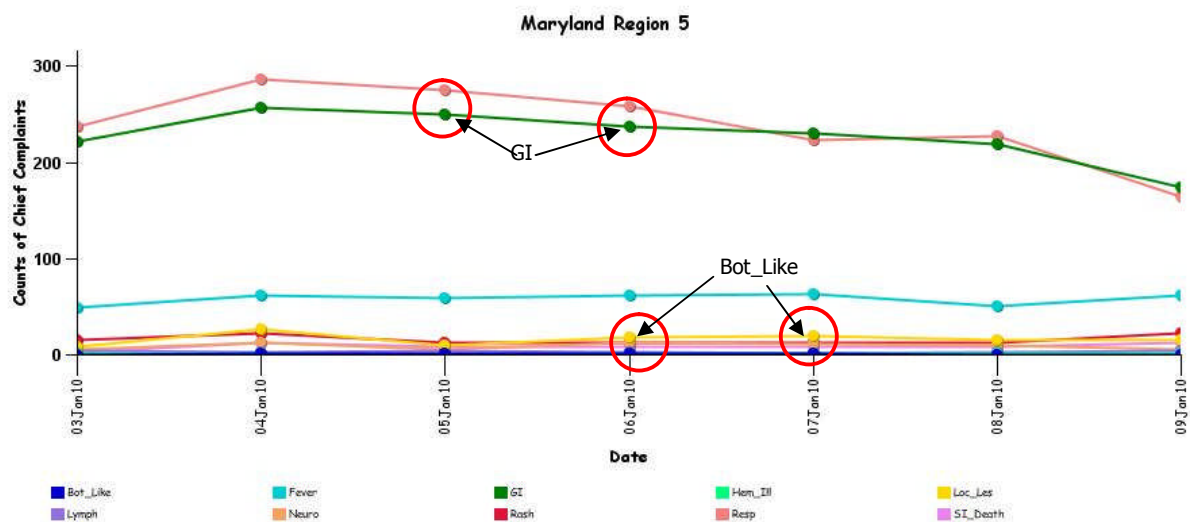
\* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



\* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



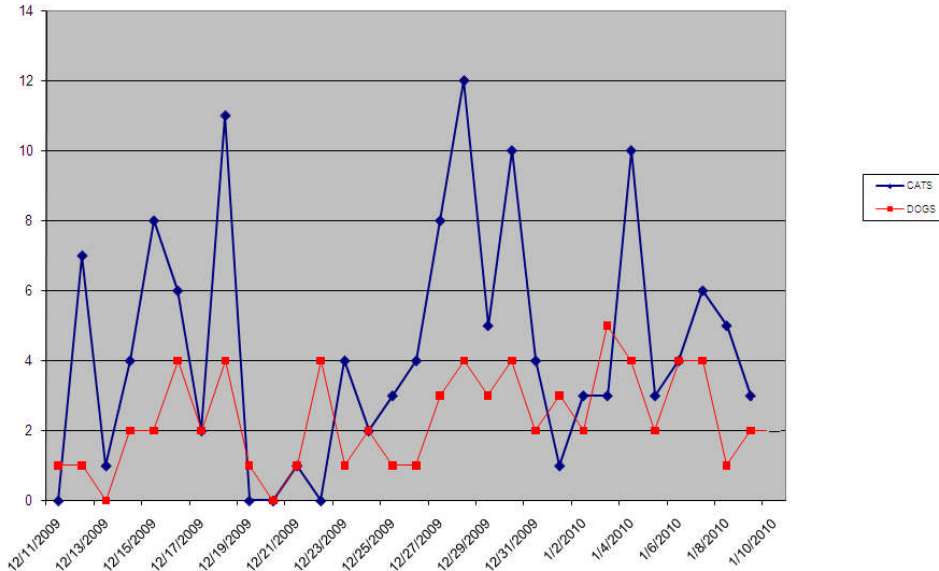
\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

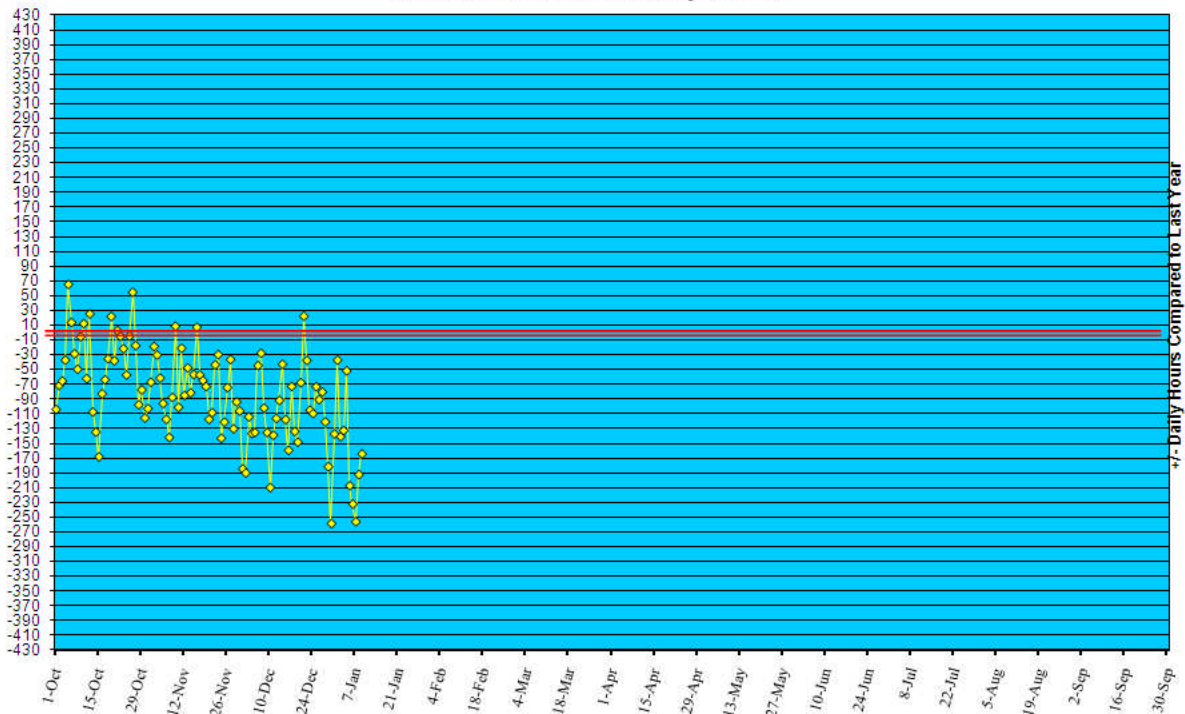
**Dead Animal Pick-Up Calls to 311**



#### **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/09.

**Statewide Yellow Alert Comparison  
Daily Historical Deviations  
October 1, '09 to January 09, '10**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2009 did not identify any cases of possible public health threats.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (Jan 03- Jan 09, 2010):	22	0
Prior week (Dec Dec 27- Jan 02, 2010):	06	0
Week#01, 2009 (Jan 4- Jan 10, 2009):	12	0

**OUTBREAKS:** 5 outbreaks were reported to DHMH during MMWR Week 01 (January 03 - January 09, 2010):

#### **2 Gastroenteritis outbreaks**

2 outbreaks of GASTROENTERITIS in Nursing Homes

#### **2 Foodborne Gastroenteritis outbreaks**

2 outbreaks of GASTROENTERITIS/FOODBORNE associated with Restaurants

#### **1 Rash illness outbreak**

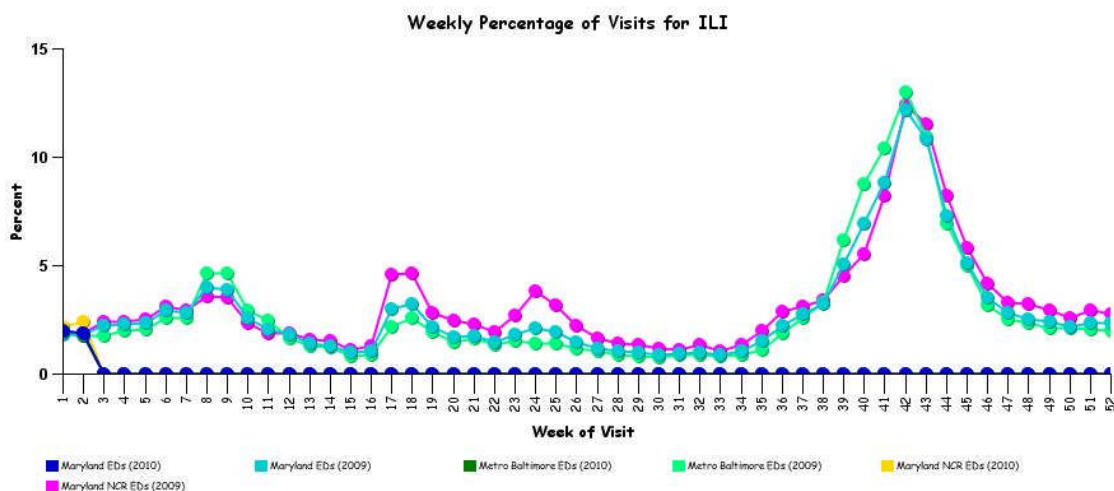
1 outbreak of SCABIES in a Nursing Home

**MARYLAND INFLUENZA STATUS:** Influenza activity in Maryland for Week 01 is SPORADIC.

## **SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS**

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the



week.

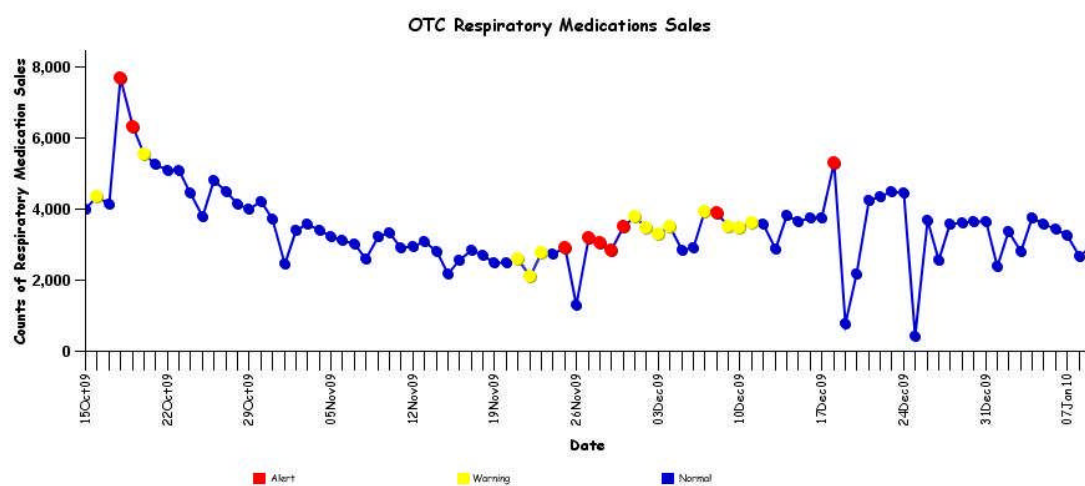
\* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



\*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



## **PANDEMIC INFLUENZA UPDATE:**

**WHO Pandemic Influenza Phase:** Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

**US Pandemic Influenza Stage:** Stage 0: New domestic animal outbreak in at-risk country

**\*\*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**  
[http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex\(Vers7.2\).pdf](http://preparedness.dhmm.maryland.gov/Docs/PandemicInfluenza/PandemicInfluenzaResponseAnnex(Vers7.2).pdf)

## **AVIAN INFLUENZA-RELATED REPORTS:**

**WHO update:** As of December 30, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 467, of which 282 have been fatal. Thus, the case fatality rate for human H5N1 is about 60%.

## **H1N1 INFLUENZA (Swine Flu):**

**INFLUENZA PANDEMIC (H1N1-USA):** 09 Jan 2010, Minorities in Milwaukee and the rest of Wisconsin were 2 to 3 times as likely as whites to be hospitalized for swine flu [influenza pandemic (H1N1) 2009 virus infection], a disparity that city and state health officials vowed to combat as the 2nd wave of the pandemic diminishes and the possibility of a 3rd wave looms on the horizon. "Local health agencies have to play a stepped-up role in reaching out to racial, ethnic, and linguistic minorities, those who are homebound and the homeless," said Seth Foldy, state health officer. "That is our next challenge." Milwaukee health commissioner Bevan K Baker said the disparity, which is evident also during normal seasonal flu, was not surprising. "Is it troubling. Yes, it's troubling." From 30 Aug to 21 Dec 2009, non-Hispanic whites in Milwaukee were hospitalized for the pandemic (H1N1) 2009 virus at a rate of just over 14 for every 100 000 people; the rate for blacks was almost 28 per 100 000, and for Hispanics, more than 32 per 100 000. In the same period, the statewide hospitalization rates were 11 per 100 000 for whites, almost 38 per 100 000 for blacks and more than 30 per 100 000 for Hispanics. The hospitalization rate for American Indians in Wisconsin was almost 35 per 100 000. Overall swine flu [pandemic (H1N1) 2009 influenza virus infection] has been linked to 50 deaths in Wisconsin. Since September [2009], the illness has caused 1229 hospitalizations in the state. Officials don't know all of the reasons why there is a racial and ethnic disparity in flu hospitalizations, but suggested a number of possibilities. The nation already has disparities in a wide range of health care measures, including diabetes, infant mortality, and teenage pregnancy. More to the point, minority populations have higher rates for some of the underlying medical conditions that can make swine flu more severe: diabetes, cardiovascular disease, and obesity. A host of other issues may play a role in the swine flu disparity, including having transportation to clinics, access to health care and health insurance. State and local health leaders said they anticipated this disparity and made extra efforts to reach minority populations with vaccine clinics. Health agencies worked with faith-based and community-based organizations to organize clinics. They announced clinics on local radio stations in Spanish and Hmong [the language of an Asian ethnic group of people from the mountainous regions of Viet Nam, Laos, Thailand, and Myanmar, many of whom have settled in the United States. Paul A Biedrzycki, Milwaukee's director of disease control and environmental health, said the city worked with the Black Health Coalition and set up clinics in census areas with large black and Hispanic populations. Biedrzycki said the city's health department is already examining ways to reduce the racial and ethnic disparities in swine flu hospitalizations. One possibility is forming health "strike teams" that could be dispatched to schools in neighborhoods where there are many flu cases.

**INFLUENZA PANDEMIC (H1N1, TURKEY- USA):** 08 Jan 2010, The California Animal Health and Food Safety (CAHFS) Laboratory has identified the presence of the H1N1 influenza virus in a turkey breeding flock in California's Central Valley, the American Veterinary Medical Association (AVMA) has learned today [6 Jan 2010]. The CAHFS Laboratory confirmed 2009 H1N1 influenza infection on 28 Dec 2009, by testing of samples taken from the infected flock. There had been no clinical signs of illness in the flock other than a decrease in egg production. Although the State of California has not officially quarantined the facility, the producer has imposed a self quarantine until further testing has been completed. Samples were forwarded to the National Veterinary Services Laboratories (NVSL) in Ames, Iowa, for additional confirmatory testing. In the United States, turkeys have previously tested positive for the H1N1 virus in Virginia. They have also tested positive in Canada and Chile. In addition, the virus has been identified in pigs, cats, ferrets, and a dog.

**INFLUENZA PANDEMIC (H1N1- CHINA):** 05 Jan 2010, China said Monday [4 Jan 2010] it had recorded 659 swine flu [influenza pandemic (H1N1) 2009 virus infection] deaths in 2009, nearly all of them in the last 2 months of the year, and warned that the danger of mass outbreaks still existed in certain areas. The health ministry said the total number of A(H1N1) [2009 virus] infections recorded since the virus was 1st detected last year stood at 120 940. At the end of October [2009], the reported death toll stood at just 6. The number of recorded deaths then spiked, reaching about 180 at the start of December [2009] and 659 by the end of that month. "The danger of an explosion of outbreaks in some places exists, and the number of fatalities and serious cases will remain at a rather high level," said Liang Wannian, director of the ministry's emergency response office. Serious difficulties remained in containing the spread of the virus in rural areas and at schools, Liang told a press conference. Ministry



officials had already warned of a "grim" winter flu outlook, and are urging caution ahead of the February [2010] Lunar New Year holidays, when hundreds of millions of people swamp roads and railways to visit family. In November [2009], renowned medical whistle-blower Zhong Nanshan, who helped expose the scale of the 2003 outbreak of Severe Acute Respiratory Syndrome [SARS], said the true A(H1N1) death count was being covered up. The government responded by ordering more accurate case reporting by officials. China has so far vaccinated 49.9 million people, Liang said -- the largest campaign in the world, but still only a small proportion of the country's 1.3 billion people. Chinese laboratories were at the forefront of worldwide efforts to develop and mass-produce a swine flu vaccine, but the quick clinical trials and production cycle led to concerns that the shot was perhaps unsafe. Liang said China's vaccine was not linked to the deaths last month of 2 people following their inoculations. "Following confirmation, the deaths... had nothing to do with the inoculations," Liang said, without giving the causes of death or any details about the 2 deceased. Officials have said that adverse reactions were only reported in a handful of cases -- about one out of a million jabs.

#### **Resources:**

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmh.maryland.gov/swineflu/>

### **NATIONAL DISEASE REPORTS**

**ANTHRAX, HUMAN (NEW HAMPSHIRE):** 08 Jan 2010, A New Hampshire state health official says more than 2 dozen people who attended a drum circle where a woman likely contracted anthrax are taking antibiotics or getting vaccinated. Chris Adamski of the Department of Health and Human Services says authorities have spoken to about 50 of the 60 people who attended the event at a campus ministry center last month [December 2009], and most have decided to take precautions. State officials were working with Environmental Protection Agency investigators yesterday to conduct further tests at the United Campus Ministry center building where the woman is thought to have swallowed anthrax. The woman became critically ill but is said to be improving. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**E. COLI O157 -TENDERIZED, NON-INTACT STEAK (USA):** 08 Jan 2009, The Centers for Disease Control and Prevention (CDC) is collaborating with public health officials in several states and the United States Department of Agriculture's Food Safety and Inspection Service (FSIS) to investigate a multistate outbreak of human infections due to *E. coli* O157:H7. As of 5:00 PM EDT, Mon 4 Jan 2010, 21 persons infected with the outbreak strain of *E. coli* O157:H7 had been reported from 16 states. The number of ill persons who were identified resides in each state as follows: CA (1), CO (1), FL (1), HI (1), IA (1), IN (1), KS (1), MI (1), MN (3), NV (1), OH (2), OK (1), SD (2), TN (1), UT (2), and WA (1). Known illness onset dates range from 3 Oct 2009 through 14 Dec 2009. Most patients became ill between mid-October and late November. Patients range in age from 14 to 87 years and the median age of patients is 34 years (which means half are younger than 34 years). 43 percent of patients are females. There have been 9 reported hospitalizations, 1 case of hemolytic uremic syndrome (HUS), and no deaths. The outbreak can be visually described with a chart showing the number of persons who became ill each day. This chart is called an epidemic curve or epi curve. Illnesses that occurred after 22 Dec 2009 might not yet be reported due to the time it takes between when a person becomes ill and when the illness is reported. This takes an average of 2 to 3 weeks. In early December 2009, CDC's PulseNet staff identified a multistate cluster of 14 *E. coli* O157:H7 isolates with a particular DNA fingerprint or pulsed-field gel electrophoresis (PFGE) pattern reported from 13 states. The CDC's OutbreakNet team began working with state and local partners to gather epidemiologic information about persons in the cluster to determine if any of the ill individuals had been exposed to the same food source(s). Health officials in several states who were investigating reports of *E. coli* O157:H7 illnesses in this cluster found that most ill persons had consumed beef, many in restaurants. CDC is continuing to collaborate with state and local health departments in an attempt to gather additional epidemiologic information and share this information with FSIS. At this time, at least some of the illnesses appear to be associated with products subject to a recent FSIS recall. On 24 Dec 2009, FSIS issued a notice about a recall of 248 000 pounds of beef products from National Steak and Poultry that may be contaminated with *E. coli* O157:H7. The recall was issued after FSIS determined there was an association between non-intact steaks (blade tenderized prior to further processing) and illnesses in Colorado, Iowa, Kansas, Michigan, South Dakota and Washington. (Food Safety Threats is listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

### **INTERNATIONAL DISEASE REPORTS**

**HANTAVIRUS UPDATE 2010 (CHILE):** 08 Jan 2010, Chile registered 9 deaths of a rodent-spread hantavirus in 2009, local health authorities said on Monday [4 Jan 2009]. The country reported a total of 31 cases of hantavirus [infections] last year, according to the Epidemiology Department of the Chilean Health Ministry. The latest case was reported last Thursday [31 Dec 2009], a 44-year-old peasant in the central Maule Region. He is in stable condition, the ministry said. Chile launched a campaign last November [2009] to eradicate the hantaviruses in bus stations across the country. It was believed that tourists who went on vacation in rural areas were the major carriers of the virus, which can cause a rare but potentially fatal flu-like pulmonary syndrome. People infected with the virus may develop symptoms of fever over 38.3 degrees C [101 degrees F], headaches and gastrointestinal dysfunction. Chile confirmed its 1st hantavirus case in the Metropolitan Region last November [2009]. The patient was a 20-year-old female in Lampa. She is now out of danger. The Epidemiology Department reported 43 hantavirus cases across



Chile in 2008. The department suggested residents "keep alert" against the disease during the ongoing hantavirus high season. It also called for timely hospitalization and appropriate medical treatment in the high-risk zones. One way to prevent infection with the virus is that people who travel to rural areas must open the doors and windows of a house 30 minutes before entering it, the department said in a statement. The statement gave other tips including keeping the floor clean and keeping rodents from entering a house. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, HUMAN (UNITED KINGDOM):** 07 Jan 2010, A nationwide alert has been issued to hospitals, ambulance services and GPs after a batch of heroin contaminated with anthrax killed 6 addicts in Scotland, raising fears for drug users across the UK. It is feared that the death toll will rise to at least 10 soon, the Guardian understands, after cases spread across Scotland from Glasgow to Lanarkshire, then to Dundee, Fife and now central Scotland. The 1st cases came to light before Christmas, when an addict died in hospital in Glasgow. It emerged today that the 6th addict died earlier this week in Stirling. [For location, see below.] A further 6 users with the lethal bacterial disease are in hospital, in the worst anthrax scare in recent times. Health ministers issued an alert to all primary care trusts in England tonight [7 Jan 2010] after the latest cases came to light, advising drugs workers, consultants and accidents and emergency units to watch out for suspected cases. A fresh alert has also been issued by the agency Health Protection Scotland, which has set up an outbreak control team to investigate the source of the contamination, while a parallel investigation has been launched by police. Heroin users are being urged to stop taking the drug immediately. Dr Colin Ramsay, the consultant epidemiologist at HPS who is leading the agency's inquiry, said contaminated heroin, or a contaminated cutting agent, could be responsible for the infections. "The death of this patient in NHS Forth Valley indicates further geographical spread of the cases, meaning that heroin users all across Scotland need to be aware of the risks of a potentially contaminated supply," he said. "If any heroin users do notice signs of infection, for example marked redness and swelling around an injection site, or other signs of serious infection such as a high fever, they should seek urgent medical advice." The Department of Health alert issued tonight states: "Investigations are continuing into the cause of these cases and into any heroin supply routes that may be affected. While cases remain confined to Scotland, you should be alert to the possibility of anthrax infection in injecting drug users presenting with severe soft tissue infections or sepsis." Dave Liddell, of the Scottish Drugs Forum voluntary organisation, said it was suspected that a large batch of heroin was to blame. "It was alarming when it was just centred on Glasgow; now it looks as if it's following the drugs supply route," he said. Gordon Meldrum, director general of the Scottish Crime and Drug Enforcement Agency, said the spate of deaths was disturbing. "Illegal drugs are often prepared in unhygienic surroundings and can be vulnerable to contamination from various harmful agents. It is highly probable that the contamination of heroin by anthrax is accidental and there is a history of batches of heroin being contaminated in Afghanistan, Turkey, and other countries key to the production and supply of heroin. Production processes can be basic and often be conducted in areas where there is contamination from animal carcasses or faeces. Our priority remains to reduce the harm to drug users and the communities they live in and all cases will be investigated and reported where appropriate to the procurator fiscal." The 6th casualty was well known for begging in Stirling city centre. A neighbour said: "He was a wee skinny guy with dark, straggly hair, who was a junkie and begged on the streets -- but he was a harmless wee guy. It's a shame." (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

#### **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmd.maryland.gov/>

Maryland's Resident Influenza Tracking System: [www.tinyurl.com/flu-enroll](http://www.tinyurl.com/flu-enroll)

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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